

File RFD  
15 Sep 64

14 September 1964

Declass Review by NGA.

## MEMORANDUM FOR THE RECORD

SUBJECT: Trip Report - [REDACTED]

1. On 9 September, I visited [REDACTED] to monitor PAR222. The mechanical optical breadboard has been completed and tests have been conducted for the last couple of weeks. [REDACTED] has been experimenting with non-stereo duplicate verticals and vertical stereo pairs mounted on a microscope table that uses hand controlled movement for the X direction, Y direction, and rotation. Magnification is also changed manually. Circular line scans are imaged separately on to each photo. If the two photos are in stereo registration in X, Y, rotation and magnification the two signals obtained will be similar in amplitude, shape and phase. These two signals are not truly identical on stereo pairs because the two images are slightly different in order to obtain the stereo effect.

2. The control circuitry processes these two scan signals to obtain four error signals indicating position errors of each of the four degrees of freedom. These signals are displayed on four null meters that register zero if the correlation is perfect. The two scan traces can also be examined on a CRT display. Correlation errors are corrected with the manual controls.

3. [REDACTED] is experiencing difficulty in correlating the two traces from the duplicate photos, and stereo pairs complicate the problem even more. I feel that [REDACTED] is attempting to obtain too fine a degree of correlation.

4. Funds are practically exhausted for this PAR and [REDACTED] is in the process of preparing a final report describing the results of the study and making recommendations for further work.

[REDACTED]  
Development Branch, P&DS

## Distribution:

Orig. - Circulated  
1 - Subj. File  
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